

WHAT IS CLAIMED IS:

1. An information management apparatus for managing service-related information in a system in which a plurality of electronic apparatuses are linked via network so as to work in liaison with each other to implement a desired service, the apparatus comprising:

a service-specific information acquisition section for acquiring service-specific information which is related to a combination of types of electronic apparatuses required for implementing a service;

a storage section for storing at least one piece of service-specific information acquired by the service-specific information acquisition section;

an apparatus-specific information acquisition section for acquiring apparatus-specific information which is related to each of the plurality of electronic apparatuses;

a request reception section for receiving search requests from the electronic apparatuses;

a search section for, responsive to a search request received by the request reception section, searching for the service, which can be implemented by the electronic apparatuses, based on the service-specific information stored in the storage section and the apparatus-specific information acquired by the apparatus-specific information; and

a transmission section for transmitting to the electronic apparatuses a search result which is information indicating a listing of services which can be implemented by the electronic apparatuses.

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2. The information management apparatus according to claim 1, wherein the service-specific information further contains information related to an application operable on each of the electronic apparatuses and used for implementing the service.

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3. The information management apparatus according to claim 2, further comprising an update notification section for, if the information related to the apparatus indicates an update of the application, notifying the electronic apparatuses that the application has been updated.

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4. The information management apparatus according to claim 3, further comprising an application acquisition section for, if the information related to the application indicates that an updated version of the application is available, acquiring the updated version of the application, wherein when the electronic apparatuses are notified of the update of the application, if the electronic apparatuses provide the transmission section with a notice for downloading the updated application, the transmission section transmits the updated application to the electronic

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apparatuses.

5. The information management apparatus according to claim 2, further comprising:

5 a latest application acquisition section for acquiring a latest application associated with service-specific information stored in the storage section; and

an application storage section for storing the latest application acquired by the latest application acquisition  
10 section,

wherein the transmission section, responsive to a request from the electronic apparatuses, transmits to the electronic apparatuses the latest application to be used by the electronic apparatuses to implement the service.

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6. The information management apparatus according to claim 1, wherein:

a server for managing the service-specific information is present on the network;

20 the apparatus-specific information acquisition section acquires the apparatus-specific information associated with the electronic apparatuses from the electronic apparatuses; and

the service-specific information acquisition section acquires the service-specific information from the server.

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7. The information management apparatus according to claim 6, further comprising:

an inquiry section for inquiring of the server whether the service-specific information stored in the storage section  
5 has been updated; and

a notification section for, if a result of the inquiry by the inquiry section indicates an update of the service-specific information, notifying the electronic apparatuses the service-specific information has been updated.

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8. The information management apparatus according to claim 7, wherein the inquiry section makes an inquiry to the server at regular intervals.

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9. The information management apparatus according to claim 7, further comprising an update section for, if a result of the inquiry by the inquiry section indicates an update of the service-specific information, updating the service-specific information stored in the storage section.

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10. The information management apparatus according to claim 1, wherein:

the apparatus-specific information acquisition section acquires the apparatus-specific information associated with the  
25 electronic apparatuses from the electronic apparatuses; and

the service-specific information acquisition section acquires the service-specific information from the electronic apparatuses.

5            11. The information management apparatus according to claim 1, wherein:

the information related to the combination of the types of the electronic apparatuses which is contained in the service-specific information is related to a combination of models  
10 of the electronic apparatuses;

the information management apparatus further comprises a specification section which refers to the service-specific information stored in the storage section and related to the service to be implemented by the electronic apparatuses, and specifies  
15 a model of one electronic apparatus which works in liaison with another electronic apparatus to implement the service; and

the transmission section transmits information which indicates the electronic apparatuses specified by the specification section to the electronic apparatuses which are used  
20 to implement the service.

12. The information management apparatus according to claim 2, further comprising:

a cease confirmation section for confirming the presence  
25 or absence of a ceased service corresponding to the

service-specific information stored in the storage section; and

a request section for, if the cease confirmation section determines that there is the ceased service among services associated with the service-specific information stored in the storage section, requesting the electronic apparatuses having  
5 stored therein an application associated with the ceased service to delete the application therefrom.

13. The information management apparatus according to  
10 claim 2, further comprising:

a cease confirmation section for confirming the presence or absence of a ceased service corresponding to the service-specific information stored in the storage section; and

a deletion section for, if the cease confirmation section  
15 determines that there is the ceased service among services associated with the service-specific information stored in the storage section, deleting the service-specific information associated with the ceased service from the storage section.

20 14. The information management apparatus according to claim 1, further comprising:

an apparatus-specific information storage section for storing the apparatus-specific information acquired by the apparatus-specific information acquisition section; and

25 an information deletion section for, responsive to a

request from the electronic apparatus, deleting the apparatus-specific information stored in the apparatus-specific information storage section.

5           15. The information management apparatus according to claim 14, wherein the information deletion section, responsive to the request from the electronic apparatuses, deletes the apparatus-specific information while deleting service-specific information related to services for which the electronic  
10 apparatuses associated with the deleted apparatus-specific information are used from among service-specific information related to services which can be implemented by the electronic apparatuses.

15           16. The information management apparatus according to claim 1, wherein:

          when an additional electronic apparatus is added anew to the system, the apparatus-specific information acquisition section acquires from the additional electronic apparatus  
20 information related to a user of the additional electronic apparatus together with the apparatus-specific information; and  
          the information management apparatus further comprises:

          a user information management section for managing  
25 user-related information;

a user authentication section for determining whether to register the apparatus-specific information acquired by the user information management section using the user-related information managed by the user information management section  
5 and the user-related information acquired by the apparatus-specific information acquisition section; and

an apparatus-specific information storage section for, if the user authentication section determines to register the apparatus-specific information, storing the  
10 apparatus-specific information acquired by the apparatus-specific information acquisition section.

17. The information management apparatus according to claim 1, further comprising: an apparatus-specific information  
15 storage section for storing apparatus-specific information transmitted from and associated with the electronic apparatuses; and

an apparatus determination section for determining whether the apparatus-specific information corresponding to the  
20 electronic apparatuses associated with the service-specific information obtained by the search section is stored in the apparatus-specific information storage section.

18. The information management apparatus according to  
25 claim 17, further comprising an absent electronic apparatus



notification section for, if the apparatus determination section determines that the apparatus-specific information corresponding to a type of an electronic apparatus associated with the service-specific information obtained by the search section is not stored in the apparatus-specific information storage section, notifying the electronic apparatuses, which have provided a search request, of the type of the electronic apparatus corresponding to the apparatus-specific information which is not stored in the apparatus-specific information storage section.

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19. The information management apparatus according to claim 17, wherein if the apparatus determination section determines that the apparatus-specific information corresponding to the type of the electronic apparatus associated with the service-specific information obtained by the search section, the storage section does not store the service-specific information obtained by the search section.

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20. An information management method for managing service-related information in a system in which a plurality of electronic apparatuses are linked via a network to work in liaison with each other to implement a desired service, the method comprising:

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a service-specific information acquisition step for acquiring service-specific information related to a combination

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of types of electronic apparatuses required for implementing the service;

a storage step for storing the service-specific information acquired by the service-specific information acquisition step into a storage section;

an apparatus-specific information acquisition step for acquiring the apparatus-specific information related to each of the plurality of the electronic apparatuses;

a request reception step for receiving a search request from the electronic apparatuses;

a search step for, in response to the search request received by the request reception step, searching services which can be implemented by the electronic apparatuses based on the service-specific information stored in the storage section and the apparatus-specific information acquired by the apparatus-specific information acquisition step; and

a transmission step for transmitting to the electronic apparatuses a search result which is obtained by the search step and is information indicating a listing of services which can be implemented by the electronic apparatuses.